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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/726,810 | 12/04/2003 | Ralph M. Samodell | LEEE 200314 | 4119 |
| 27885 | 7590 | 09/08/2005 | EXAMINER | |
| FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP 1100 SUPERIOR AVENUE, SEVENTH FLOOR CLEVELAND, OH 44114 | | | SHAW, CLIFFORD C | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1725 | |

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/726,810

Applicant(s)

SAMODELL, RALPH M.

Examiner

Clifford C. Shaw

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1204</u> . | 6) <input type="checkbox"/> Other: ____ |

Detailed Action

1.) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2.) Claims 26-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 26, there is no antecedent basis for "said background current resistance". In claim 29, there is no antecedent basis for "said resistance". The other claims are inadequate under 35USC112 in that they depend from inadequate claims.

3.) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.) Claims 1-4, 8-10, 25, 31-34, 37, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakabe et al. (3,665,149). The patent to Sakabe et al. (3,665,149) discloses at figures 5 and 6 and at the discussion in columns 4-6 an electric arc welder with the features claimed, including: input transformer at 2, 3a, and 3b; a gated bridge associated with elements 5a-f; a full wave rectifier bridge in parallel with the gated bridge associated with elements 9a-f; and a current control resistance at element 10.

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5.) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6.) Claims 12-16, 19-24, 26-30, 41, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakabe et al. (3,665,149). The only aspect of the claims to which the rejection above does not apply is the provision for particular resistances and the provision for two resistors at either end of the rectifier. These differences do not patentably distinguish over the prior art. It would have been obvious to have used any of a wide range of values for the resistance 10 in Sakabe et al. (3,665,149), depending on the demands of a particular welding application. In particular, it would have been obvious to have used a resistance value falling within the range claimed, the motivation being to choose a particular value of resistance for a particular welding problem. In regard to the claimed two resistors, it would have been obvious to have implemented the resistance 10 as shown in figure 6 of Sakabe et al. (3,665,149) in any convenient manner, consistent with the requirement that a particular resistance value is in series with rectifier 9. In particular, it would have been obvious to have used two series resistors to implement this resistance value, the motivation being any conventional circuit design consideration, such as better heat dissipation from two resistors than one or availability of particular resistance values.

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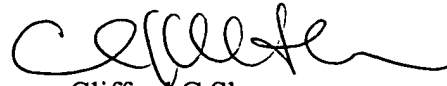
7.) Claims 5-7, 11, 17, 18, 35, 36, 39, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakabe et al. (3,665,149) as applied to the claims above further taken with Schwartz et al. (6,504,738). The only aspect of the claims to which the rejections above do not apply is the provision for AC welding. This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have configured the power supply of Sakabe et al. (3,665,149) for any well known type of welding. In particular, it would have been obvious to have configured this power supply for AC welding as claimed, the motivation being the teachings of Schwartz et al. (6,504,738) that it is advantageous to operate a gated full bridge welding power supply to provide either a DC or an AC output (see the discussion at column 6, lines 20-50 in Schwartz et al. (6,504,738)).

Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas G. Dunn, can be reached at 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Clifford C Shaw
Primary Examiner
Art Unit 1725

September 5, 2005